

**ESAT DATA VALIDATION EVALUATION CHECKLIST**  
Contract # EP-W-06-016

Task Order #: 0037 TDF #: 01079A Revision #: 0 Case/DAS #: 180-2644-1  
Site Name: Dimock SDG #: \_\_\_\_\_  
Analysis Type: Inorganic SOW #: \_\_\_\_\_  
Reviewer: Ex. 4 - CBI  
CLP Laboratory Code: TALPA

EPA CLP TPO: Dan Slizys  
EPA RPM: Rich Feltzer  
cc: \_\_\_\_\_

Region: 3

Number of hours spent on review: 3.6  
Number of samples: 24  
Validation Type: IM2  
Flat File Required Yes X No \_\_\_\_\_

Date submitted to EPA: 2/6/12

| <u>CRITERIA</u>  | <u>YES</u> | <u>NO</u> | <u>COMMENTS</u> |
|--|------------|-----------|-----------------|
| Format according to Region III protocol                | <u>/</u>   | _____     | _____           |
| Clarity of report                                      | <u>/</u>   | _____     | _____           |
| Qualifiers applied correctly                           | <u>/</u>   | _____     | _____           |
| Consistency between narrative and data summary form(s) | <u>/</u>   | _____     | _____           |
| Error-free transcription                               | <u>/</u>   | _____     | _____           |

| <u>EFFICIENCY OF CONTRACTOR</u>             | <u>YES</u> | <u>NO</u> | <u>COMMENTS</u>                               |
|---|------------|-----------|---|
| Approval recommended for current submission | <u>/</u>   | _____     | _____   |
| Time spent on review is reasonable          | <u>/</u>   | _____     | _____   |
| Technical Evaluation                        | <u>4.1</u> | _____     | <u>[Signature]</u> 06 Feb 12<br>EPA Oversight |

ESD OVERSIGHT

|                     |                            |                               |                                  |
|---------------------|----------------------------|-------------------------------|----------------------------------|
| <b>DATES</b>        | <b>EPA</b>                 | <b>Oversight</b> <u>3 Jan</u> | <b>ESAT</b>                      |
| Received at EPA     | <u>2/6/2012</u>            |                               |                                  |
| Oversight assigned  | <u>2/6/2012</u> <u>CHD</u> |                               |                                  |
| Oversight received  |                            | <u>06 Feb 2012</u>            |                                  |
| Oversight completed |                            | <u>06 Feb 2012</u>            |                                  |
| Feedback given      | _____                      |                               |                                  |
| Mailed to RPM       |                            |                               | <u>[Signature]</u> <u>2/7/12</u> |

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
Environmental Sciences Center  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

DATE : February 7, 2012

SUBJECT: Region III Data QA Review

FROM: Colleen Walling *Colleen Walling*  
Region III ESAT RPO (3EA20)

TO: Rich Fetzer  
Regional Project Manager (3HS31)

Attached is the inorganic data validation report for the Dimock Residential Groundwater site (Case #: 180-2644-01 (4 samples) completed by the Region III Environmental Services Assistance Team (ESAT) contractor under the direction of Region III EAID.

If you have any questions regarding this review, please call me at (410) 305-2763.

Attachment

TO: #0037 TDF: #01079A~~A~~

cc: Gene Nancy (Techlaw)  
Suddha Graves (Techlaw)

OFFICE OF ANALYTICAL SERVICES AND QUALITY ASSURANCE

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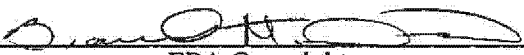
EPA CLP TPO: Dan Slizys  
EPA RPM: Rich Fafar  
cc: \_\_\_\_\_

Region: 3

Number of hours spent on review: 3.6  
Number of samples: 24  
Validation Type: IM2  
Flat File Required Yes ☒ No ☐

Date submitted to EPA: 4/6/12

| <u>CRITERIA</u>  | <u>YES</u>                          | <u>NO</u>                | <u>COMMENTS</u> |
|--|-------------------------------------|--------------------------|-----------------|
| Format according to Region III protocol                | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                 |
| Clarity of report                                      | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                 |
| Qualifiers applied correctly                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                 |
| Consistency between narrative and data summary form(s) | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                 |
| Error-free transcription                               | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                 |

| <u>EFFICIENCY OF CONTRACTOR</u>             | <u>YES</u>                          | <u>NO</u>                | <u>COMMENTS</u>   |
|---|-------------------------------------|--------------------------|---|
| Approval recommended for current submission | <input checked="" type="checkbox"/> | <input type="checkbox"/> |   |
| Time spent on review is reasonable          | <input checked="" type="checkbox"/> | <input type="checkbox"/> |   |
| Technical Evaluation                        | 4.1                                 |                          | <br>EPA Oversight 06 Feb 12 |

**ESD OVERSIGHT**

|                     |          |             |      |
|---------------------|----------|-------------|------|
| DATES               | EPA      | Oversight   | ESAT |
| Received at EPA     | 2/6/2012 | Bsm         |      |
| Oversight assigned  | 2/6/2012 |             |      |
| Oversight received  |          | 06 Feb 2012 |      |
| Oversight completed |          | 06 Feb 2012 |      |
| Feedback given      |          |             |      |
| Mailed to RPM       |          |             |      |



Environmental Protection Agency  
Office of Emergency and Remedial Response  
**TECHNICAL DIRECTION FORM**  
**Region 3 - ESAT**

Contract No.: EP-W-06-016

Contractor: Lockheed/Martin Srvcs Inc.

Task Order No.: 0037

Sub-Task No.:

Technical Direction No. 01079A Revised

Task Order Project Officer: Colleen K. Walling

Phone: (410) 305-2763

Description of Task: Provide Data Review Data Validation other related DV support tasks for the Dimock Site fast turn-around-time analyses & data review - Highest Priority

Account Number: 2012TO3N303DC6A3TARS00

Deliverable Due Date: for 2/1/2012 - 2/14/2012 48 hr TAT from receipt of data

**TASK DESCRIPTION: DIMOCK Site High Priority**

ESAT shall perform data validation and data review including related support task activities as highest priority fast turnaround time within 48 hrs or less for this Superfund site for the parameters listed in the attachments; and any other parameters included in the data packages as requested (e.g., metals, semi-volatiles, etc.) for very fast TAT.

ESAT shall follow the SOPs, Task Order SOW, and all guidance documents to the best of their ability, and utilize their technical expertise for review of data received from either the Contract Laboratory Program (CLP); and/or, from Tier IV, 3<sup>rd</sup> party outside laboratories for the parameters listed in the attachments.

ESAT shall discuss with the Technical Monitors any concerns or anomalies with the data.

ESAT shall not hold up the data review process to perform the CEAT audits. The CEAT audits can be performed at a later date after the data reviews/data validations have been completed. However, ESAT shall note missing information/deliverables during the review process.

ESAT shall be aware that some of the analytical methods are proprietary and may find the need to utilize their professional experience, knowledge, and judgment to assess the data. ESAT shall be aware that this is sensitive data.

Any questions or concerns that may arise shall be discussed with the Technical Monitors.

ESAT may be required to participate in meetings or conference calls to discuss the technical aspects regarding the data

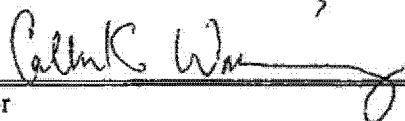
**Deliverables**

Data Validation Reports within 48 hours of receipt of the data.

The Technical Monitors: Ed Messer, J. Burman, Mike Mahoney, Fred Foreman, Brandon McDonald, Cynthia Caporale, and Terry Simpson.

I CERTIFY THAT THIS TECHNICAL DIRECTIVE DOES NOT REQUEST SERVICES THAT ARE INHERENTLY GOVERNMENTAL FUNCTIONS AND THAT IT DOES NOT ALTER THE (1) STATEMENT OF WORK, (2) LEVEL OF EFFORT, (3) COST OF PERFORMING THE AUTHORIZED WORK, (4) NUMBER OF DELIVERABLES, OR (5) THE DUE DATES OF DELIVERABLES FOR THE ABOVE REFERENCED TASK ORDER.

TOPO Signature



Date

2/3/2012

Original to Contractor

cc: TOPO file

Project Officer

Contracting Officer

Page 1 of 1





Environmental Protection Agency  
Office of Emergency and Remedial Response  
**TECHNICAL DIRECTION FORM**  
**Region 3 - ESAT**

Contract No.: EP-W-06-016

Contractor: Lockheed/Martin Srvcs Inc.

Task Order No.: 0037

Sub-Task No.:

Technical Direction No. 01079

Task Order Project Officer: Colleen K. Walling Phone: (410) 305-2763

Description of Task: Provide Data Review Data Validation other related DV support tasks for the Dimock Site fast turn-around-time analyses & data review - Highest Priority

Account Number: 2012T03N303DC6A3TARS00

Deliverable Due Date: for 2/1/2012 - 2/14/2012 48 hr TAT from receipt of data

**TASK DESCRIPTION: DIMOCK Site High Priority**

ESAT shall perform data validation and data review including related support task activities as highest priority fast turnaround time within 48 hrs or less for this Superfund site for the parameters listed in the attachments.

ESAT shall follow the SOPs, Task Order SOW, and all guidance documents to the best of their ability, and utilize their technical expertise for review of data received from Tier IV, 3<sup>rd</sup> party outside laboratories for the parameters listed in the attachments.

ESAT shall discuss with the Technical Monitors any concerns or anomalies with the data.

ESAT shall not hold up the data review process to perform the CEAT audits. The CEAT audits can be performed at a later date after the data reviews/data validations have been completed. However, ESAT shall note missing information/deliverables during the review process.

ESAT shall be aware that some of the analytical methods are proprietary and may find the need to utilize their professional experience, knowledge, and judgment to assess the data. ESAT shall be aware that this is sensitive data.

Any questions or concerns that may arise shall be discussed with the Technical Monitors.

ESAT may be required to participate in meetings or conference calls to discuss the technical aspects regarding the data assessment.

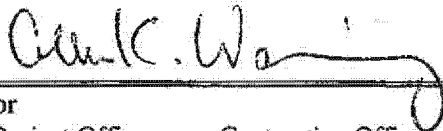
**Deliverables**

Data Validation Reports within 48 hours of receipt of the data.

The Technical Monitors: Ed Messer, J. Burman, Mike Mahoney, Fred Foreman, Brandon McDonald, Cynthia Caporale, and Terry Simpson.

I CERTIFY THAT THIS TECHNICAL DIRECTIVE DOES NOT REQUEST SERVICES THAT ARE INHERENTLY GOVERNMENTAL FUNCTIONS AND THAT IT DOES NOT ALTER THE (1) STATEMENT OF WORK, (2) LEVEL OF EFFORT, (3) COST OF PERFORMING THE AUTHORIZED WORK, (4) NUMBER OF DELIVERABLES, OR (5) THE DUE DATES OF DELIVERABLES FOR THE ABOVE REFERENCED TASK ORDER.

TOPO Signature



Date

2/2/2012

Original to Contractor

cc: TOPO file

Project Officer

Contracting Officer

Page 1 of 1





R33917, Dimock Residential GW site: proprietary methods

Ex. 4 - CBI to: Colleen Walling

01/23/2012 11:31 AM

Cc: Ex. 4 - CBI

Dear Colleen,

The parameters for DAS R33917 include three methods which are proprietary and belong to Isotech, the lab which will be analyzing the samples. If ESAT is to validate the data from these proprietary methods, we will need access to the methods. Would you please look into this situation and let us know how you wish to proceed? Thank you very much.

\*\*\*\*\*

Ex. 4 - CBI

ESAT Auditor, Region 3

**Ex. 4 - CBI**



# Collection of Ground Water Samples from Domestic and Municipal Water Wells for Dissolved Gas Analysis

These instructions are based on sampling protocol created by Anthony Gorody, adopted by the Colorado Oil and Gas Conservation Commission, and are reproduced here with their permission.

The basic technique is to fill a white 5 gallon bucket with source water and then fill the 1 liter sample collection bottle fully immersed in the bucket.

When sampling from a pressurized water system, it is recommended to use an outdoor spigot or other source which bypasses any water treatment systems (i.e. water softeners, etc.).

**To collect a sample for isotopic and chromatographic analysis from water that is not effervescent, using 1L bottle with septum cap:**

After purging the well, fill the 5 gallon bucket with water. Attach a nozzle and 12" length of ¼ inch diameter tubing to the end of the 5/8 inch hose connected to a faucet. Make sure that the flow rates through the tubing are low. Remove the cap of the 1 L bottle and fill it with water. Once the bottle filled, immerse it in the 5 gallon bucket full of water, keeping the tubing at the bottom of the bottle. Place the bottle at the bottom of the bucket under a head of water, and keep water flowing at a low rate until another 2 volumes of water have been displaced from the bottle. Then slowly lift the tubing out of the bottle and immediately cap it under water. No air should be allowed into the 1 L bottle. When finished, tape the cap to the bottle around the neck, pack the bottle upside down in ice, and ship it overnight.

**To collect a headspace gas sample from an effervescent water well:**

Fill the bottle with water. Submerge the bottle into the 5 gallon bucket filled with well water and invert it. Insert the ¼ inch tubing into the bottle, increase the flow rate to 2-3 gpm and allow the bubbling gases to displace water in a headspace until 1/4 to 1/2 of the water in the bottle has been displaced. Seal the container under water with the septum and screw cap, tighten it securely. When finished, tape the cap to the bottle around the neck, pack the bottle upside down in ice, and ship it overnight.

Please note Isotech's receiving hours of **Monday thru Friday** 8:00 am to 4:30 pm.

Ship samples to:

Isotech Laboratories, Inc.  
1308 Parkland Court  
Champaign, IL 61821

These instructions have been provided to simplify the collection of samples for dissolved gas analysis. Although we try to foresee and avoid problems in the field, it is never possible to predict every situation. If you encounter any difficulties, or if any additions or changes in these instructions would be beneficial, please let us know. Isotech Laboratories, Inc. makes no warrantee as to the applicability and/or safety of the procedures described herein.

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Expedited TATs for Dimock  
Nance, Gene

to:

Dan Slizys, John Kwedar, Carroll Harris

01/12/2012 12:37 PM

Cc:

Fred Foreman, Stevie Wilding, Kevin Martin, Cynthia Caporale, "Graves, Suddha", Richard Rupert, "Carter, Joe"

Hide Details

From: "Nance, Gene" <Gnance@TechLawInc.com> Sort List...

To: Dan Slizys/ESC/R3/USEPA/US, John Kwedar/ESC/R3/USEPA/US@EPA, Carroll Harris/ESC/R3/USEPA/US@EPA

Cc: Fred Foreman/ESC/R3/USEPA/US@EPA, Stevie Wilding/ESC/R3/USEPA/US, Kevin Martin/ESC/R3/USEPA/US@EPA, Cynthia Caporale/ESC/R3/USEPA/US@EPA, "Graves, Suddha" <Sgraves@TechLawInc.com>, Richard Rupert/R3/USEPA/US, "Carter, Joe" <Jcarter@TechLawInc.com>

#### 1 Attachment



Dimock\_OASQA\_DAS Request\_REV01\_01122012.doc

Dan,

Attached is a revision/clarification of the DAS analytical request for Dimock. OSC Rupert clarified that the expedited TAT needed for the specified list of parameters should be 5 days. Also, I omitted the RSK-175 parameters from the list of compounds/analytes requiring expedited TATs (mentioned in 'Special Instructions' box of initial request).

To summarize, a 5-day TAT for preliminary results is desired/requested for the following compounds/analytes:

- Methane, ethane, ethene (RSK-175);
- bis(2-ethylhexyl) phthalate (DEHP) (part of SVOC analysis by OLC03.2);
- aluminum, arsenic, lithium, manganese, sodium, iron (part of total metals analysis);
- 2-methoxyethanol (Ethylene glycol monomethyl ether);

**Nonresponsive**

1/20/2012

- ethylene glycol; and
- triethylene glycol, and 2,2'-oxybisethanol (diethylene glycol).

Thanks.

Gene Nance  
TechLaw, Inc.  
740.867.0968 (office)  
304.830.1442 (mobile)

**Nonresponsive**

1/30/2012



## 10.0 DELIVERABLES

The following deliverables will be provided under this project:

### Analytical Data

- Expedited preliminary data turnaround time (<5 days) will be provided on the following list of compounds/tests:

|   |           |
|---|-----------|
| coliform bacteria                                   | aluminum  |
| bis(2-ethylhexyl) phthalate (DEHP)                  | arsenic   |
| ethylene glycol                                     | lithium   |
| 2-methoxyethanol (Ethylene glycol monomethyl ether) | manganese |
| methane   | sodium    |
| 2,2'-oxybisethanol (diethylene glycol)              | iron      |
| triethylene glycol                                  |           |

- With exceptions listed above, preliminary unvalidated data will be provided to the EPA OSC within 15 business days after receipt of the samples at the laboratory.
- A Data Validation Report will be provided to the EPA OSC within approximately 21 days of receipt of the laboratory analytical data package by TechLaw.
- TechLaw will incorporate the validated data from this sampling event into a Trip Report and/or After Action Report for the project.

## 11.0 REFERENCES

- EPA, 2011. U.S. Environmental Protection Agency, *Contract Laboratory Program (CLP) Guidance for Field Samplers, Final*, Office of Solid Waste and Emergency Response (OSWER) publication EPA540-R-07-006, Washington, D.C. January.
- ERT, 1994. U.S. Environmental Protection Agency Environmental Response Team. Standard Operating Procedure for Surface Water Sampling, SOP# 2013. January 26.
- ERT, 1995. U.S. Environmental Protection Agency Environmental Response Team. Standard Operating Procedure for Groundwater Well Sampling, SOP# 2007. January 26.
- Isotech, 2011. Isotech Laboratories, Inc., Collection of Ground Water Samples from Domestic and Municipal Water Wells for Dissolved Gas Analysis, Website Accessed December 2011:  
< <http://www.isotechlabs.com/customersupport/samplingprocedures/DGbottle.pdf>>



## U.S EPA Region III Analytical Request Form

Revision 11.09

### OASQA USE ONLY

|           |        |                |         |
|-----------|--------|----------------|---------|
| Control # | CT5878 | RAS #          |         |
| DAS#      | R33917 | NSF #          |         |
| PES #     |        | Analytical TAT | 14 DAYS |

|   |                                  |  |                                    |
|---|----------------------------------|--|------------------------------------|
| Date: 01/20/2012 revised 1/31/12  |                                  | Site Activity: Removal Site Evaluation                       |                                    |
| Site Name: Dimock Residential Groundwater Site  |                                  | Street Address: PA RT 229 @ 2024                             |                                    |
| City: Dimock  | State: PA 18847                  | Latitude:  | Longitude:                         |
| Program: Superfund  | Acct. #: 2012 T03N303DC6A3TARS00 | CERCLIS #: Unknown   |                                    |
| Site ID: N/A  | Spill ID: A3TA                   | Operable Unit:   |                                    |
| Site Specific QA Plan Submitted: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes  |                                  | Title: Residential Well Sampling QA/QC Work Plan             |                                    |
|   |                                  | Date Approved: January 8, 2012                               |                                    |
| EPA Project Leader: Rich Fetzer   | Phone#: 215-341-6307             | Cell Phone #: 215-341-6307                                   | E-mail: fetzer.richard@epa.gov     |
| Request Preparer: Gene Nance  | Phone#: 740-867-0968             | Cell Phone #: 304-830-1442                                   | E-mail: gnance@techlawinc.com      |
| Site Leader: Suddha Graves  | Phone#: 304-230-1230             | Cell Phone #: 304-830-1441                                   | E-mail: sgraves@techlawinc.com     |
| Contractor: TechLaw, Inc.   |                                  | EPA CO/PO: Denise T. Jones/Karen Esposito                    |                                    |
| #Samples: up to 130   | Matrix: drinking water           | Parameter: Coliform - Total and Fecal                        | Method: SM 9222B                   |
| #Samples: up to 130   | Matrix: drinking water           | Parameter: Heterotrophic Plate Count (Bacteria)              | Method: SM 9215B                   |
| # Samples: up to 130  | Matrix: drinking water           | Parameter: Ethylene glycol                                   | Method: SW846 8015M                |
| #Samples 20   | Matrix: drinking water           | Parameter: compositional analysis of headspace gas - GC MS   | Method: Isotech proprietary method |
| #Samples 20   | Matrix: drinking water           | Parameter: d <sup>13</sup> C and d <sup>2</sup> H of methane | Method: Isotech proprietary method |
| #Samples 20   | Matrix: drinking water           | Parameter: Stable isotopes of water (O, H)                   | Method: Isotech proprietary method |
| #Samples 30   | Matrix: drinking water           | Parameter: Glycols   | Method: SW846 8015M                |
| Ship Date From: Jan 30, 2012  | Ship Date To: March 2, 2012      | Org. Validation Level M3                                     | Inorg. Validation Level            |
| Unvalidated Data Requested: <input type="checkbox"/> No <input type="checkbox"/> Yes If Yes, TAT Needed: <input type="checkbox"/> 24hrs <input type="checkbox"/> 48hrs <input type="checkbox"/> 72hrs <input type="checkbox"/> 7days <input type="checkbox"/> Other (Specify) <b>not applicable</b>   |                                  |  |                                    |
| Validated Data Package Due: <input checked="" type="checkbox"/> 14 days <input type="checkbox"/> 21 days <input checked="" type="checkbox"/> 35 days <input type="checkbox"/> 42 days <input type="checkbox"/> Other (Specify) <b>14-day TAT-bacteria; 35-day ethylene glycol and headspace/isotopes</b>  |                                  |  |                                    |
| Electronic Data Deliverables Required: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (EDDs will be provided in Region 3 EDD Format) if available  |                                  |  |                                    |
| Special Instructions: Request for data validation of Tier IV data.  |                                  |  |                                    |
| <ul style="list-style-type: none"> <li>- Compositional headspace gas analysis, d<sup>13</sup> C and d<sup>2</sup> H of methane, and Stable isotopes of water (O, H) analysis will be performed by Isotech Laboratories, Inc, located in Champaign, IL using proprietary methods. Isotech QAPP is attached.</li> <li>- Bacteria: Coliform (Total and fecal) and heterotrophic plate count (HPC).</li> <li>- Ethylene glycol analysis by Pace Analytical, Indianapolis Laboratory.</li> <li>- Glycols analysis by TestAmerica Buffalo.</li> </ul> |                                  |  |                                    |

FORM ARF- 03/05

DIM0192997

DIM0193015

